DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Siegenthaler, Peter **Report No:** WIR-020207 Address: 333 Burma Road **Date Inspected:** 24-Jan-2011

City: Oakland, CA 94607

Project Name: SAS Superstructure OSM Arrival Time: 1500 **OSM Departure Time:** 300 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** ShangHai, China

CWI Name: Sha Zhi **CWI Present:** Yes No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No **Weld Procedures Followed:** Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No Yes No N/A **Delayed / Cancelled:**

34-0006 **Bridge No: Component:** OBG

Summary of Items Observed:

Summary of Items Observed: On this date Caltrans OSM Quality Assurance(QA) Inspector, DJ Shin was present during the times noted above for observations relative to the work being performed.

Bay 14

This QA Inspector observed the following work in progress for Bay 14.

ZPMC was using the Shield Metal Arc Welding (SMAW) process.

ZPMC QC is identified as Qui Wen.

Welding variables recorded by QC appeared to comply with the approved Welding Procedure Specification (WPS).

Listed below are the locations that were identified by this QA inspector

Components: Segment 14W PCMK: SP3020A2-381,383

Welder: 037780

WPS-B-P-2213-TC-U4b-FCM-1

This QA Inspector observed the following work in progress for Bay 14.

ZPMC was using the Flux Core Arc Welding (FCAW) process.

ZPMC QC is identified as Qui Wen.

Welding variables recorded by QC appeared to comply with the approved Welding Procedure Specifications (WPS). Listed below are the locations that were identified by this QA inspector.

WELDING INSPECTION REPORT

(Continued Page 2 of 3)

Components: Segment 14W PCMK: SP3020A2-371,373,375

Welder: 068445

WPS-B-T-2233-ESAB

PCMK: SP3020A2-389

Welder: 067765

WPS-B-T-2233-ESAB

This QA Inspector observed ZPMC NDT technician performing Magnetic Particle Testing (MT) on Weld No: SEG-3015-007. This weld joins deck panel DP3143A to corner assembly CA3143A with a Completed Joint Penetration (CJP) weld seam in the longitudinal direction. This is for segment 13CW at the West line. During the testing performed by ZPMC this QA inspector observed a longitudinal crack in FCAW root pass. The longitudinal crack length was the entire length of weld (12.3 meters). Once ZPMC returned from their dinner break, this QA inspector noted that ZPMC preparing to start the Submerged ARC Welding (SAW) pass for this location, at this time this QA inspector called ZPMC CWI QC Inspector Mr. Qui Wen to inform

Him for ZPMC's intention to start welding, The QC inspector arrived onsite to discuss with the Shop leader of the steps needed to rectify and repair cracked weld. This QA inspector was informed by ZPMC that they would stop the welding process and fix the linear crack for this

Weldment before placing the SAW weld process, This QA inspector had also performed MT to Verify the centerline crack that was observed. (See attached Photos)

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.





WELDING INSPECTION REPORT

(Continued Page 3 of 3)







Summary of Conversations:

No relevant conversations

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or 15000422372, who represents the Office of Structural Materials for remedial efforts please contact Eric Tsang your project.

Inspected By:	Shin,DJ	Quality Assurance Inspector
Reviewed By:	Riley,Ken	QA Reviewer